

REMARKS

Claims 22-73 are pending in the Application, and all have been rejected in the Office action mailed October 17, 2006. Claims 22, 28, 29, 36, 43, 47, 51 and 60 are independent claims. Claims 23-27, 30-35, 37-42, 44-46, 48-50, 52-59 and 61-73 depend, respectively, from independent claims 22, 29, 36, 43, 47, 51 and 60, respectively. The Applicants respectfully request reconsideration of the pending claims 22-73, in light of the following remarks.

Rejections of Claims

New Rejections Under 35 U.S.C. §102(b)

Claims 22, 27-29, 32, 35, 36, 39, 42, 47, 50, 51 and 54 were rejected under 35 U.S.C. §102(b) as being anticipated by Berken et al. (PCT WO 91/08629, hereinafter "Berken"). The Applicants respectfully traverse the rejection.

With regard to the anticipation rejections, MPEP 2131 states, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 2 USPQ2d 1051, 1053 (Fed.Cir. 1987). MPEP 2131 also states, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Regarding claims 22, 28, 29, 36, 47 and 51, the Applicants respectfully submit that Berken fails to teach or disclose, at least, "...wherein the digital voice data packets comprise destination information used for routing the digital voice data packets...", as recited in claims 22, 28; "...wherein the digital voice data packets comprise destination information used for routing the digital voice data packets through the communication network...", as recited in claim 29; "...wherein the digital voice data is packetized according to a packet protocol comprising destination information used for routing the digital voice data packetized according to the packet protocol through the communication network...", as recited in claim 36; "...wherein the digital voice packets comprise destination information used for routing the digital voice packets through the network...", as recited in claim 47; and "...wherein the digital voice packets comprise

destination information used for routing the digital voice packets through the network..."; as recited in claim 51.

The Office action states that Berken discloses "...wherein the digital voice packets comprise destination information (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header for the voice time slot) used for routing the digital voice data packets (see page 9, line 1-10; see page 10, line 17-30; control time slot of the transmit/receive frame comprises target/destination routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN; and/or a packet header of the voice time slot comprises target/destination routing/information through PSTN, Ethernet LAN, or Token Ring LAN)." (Office action page 4, lines 50-11) The text cited in the Office action suggests correspondence between the "destination information used for routing" of Applicants claims 22, 28, 29, 36, 47 and 51, and the control time slot and/or packet header for the voice time slot. Applicants respectfully disagree with the suggested correspondence, and submit that there is no valid basis for alleging such a correspondence.

Applicants respectfully submit that Berken teaches a wireless in-building telecommunication system for voice and data communication having at least one node and a multiplicity of user modules linked to the node via a shared RF communications path. (Abstract) Time on the shared RF communications path is divided into frames, each frame comprising a number of time slots that are divided into two basics groups, node transmit and node receive, and that each of the two groups are further divided into three subgroups, control time slots, voice time slots and data time slots. (FIG. 2; page 10, lines 16-22; FIG. 3; page 9, lines 2-5) Each time slot contains a packet of information that is divided into four parts: bus control, packet preamble, packet header, and packet information, and the voice, data or system control information is contained in the packet information portion. (page 9, lines 6-9; page 10, line 19-20) The time slots within the frames are assigned for the use of the nodes and the multiplicity of user modules according to a bandwidth allocation scheme in which, when a module requires bandwidth, it will use a predetermined control time slot to request bandwidth from the node, and a time slot or group of time slots is then assigned to that module for its use. (Abstract; page 2, line 24 to page 3, line 18; page 9, lines 18-27; page 11, lines 3-6) Accordingly, Applicants respectfully submit that the individual time slots of any frame may be directed to any of a multiplicity of users.

The Applicants respectfully submit that the “control time slot” of Berken does not carry “digital voice data packets”, as recited in claims 22 and 29, nor does it carry “digital voice packets”, as recited in Applicants’ claims 28, 36, 47 and 51. Applicants respectfully submit that the control time slot of Berken is separate from the voice time slot, and that voice packets are contained within a voice time slot within a frame, and not within a control time slot. Any routing information alleged to be contained within packets in the control time slot is, therefore, not contained within a voice packet. This is different from and fails to anticipate Applicants’ claims 22, 28, 29, 36, 47 and 51. Applicants respectfully submit that none of FIG. 3, the “control time slot”, FIG. 4, nor any other disclosure of Berken teaches “...wherein the digital voice data packets comprise destination information used for routing the digital voice data packets...”, as recited in claims 22, 28; “...wherein the digital voice data packets comprise destination information used for routing the digital voice data packets through the communication network...”, as recited in claim 29; “...wherein the digital voice data is packetized according to a packet protocol comprising destination information used for routing the digital voice data packetized according to the packet protocol through the communication network...”, as recited in claim 36; “...wherein the digital voice packets comprise destination information used for routing the digital voice packets through the network...”, as recited in claim 47; and “...wherein the digital voice packets comprise destination information used for routing the digital voice packets through the network...”; as recited in claim 51.

Applicants also respectfully submit that the “packet header for the voice time slot” that the Office action alleges as teaching “...digital voice data packets comprise destination information used for routing...” does not comprise “...destination information used for routing the digital voice data packets...”, as recited in claims 22, 28; “...destination information used for routing the digital voice data packets through the communication network...”, as recited in claim 29; “...destination information used for routing the digital voice data packetized according to the packet protocol through the communication network...”, as recited in claim 36; and “...destination information used for routing the digital voice packets through the network...”, as recited in claims 47 and 51. Berken fails to teach anything about the contents of the packet header illustrated in FIG. 4.

To the contrary, Berken teaches that “...[w]hen a request is made for voice information transfer, a time slot is allocated for the duration of the call – this is known as a ‘circuit switched

path”. (emphasis added) (page 10, lines 30-32) Applicants respectfully submit that the “circuit switched path” taught by Berken is fundamentally different from and fails to anticipate use of digital voice packets/digital voice data packets that comprise destination information used for routing, as set forth in Applicants’ claims 22, 28, 29, 36, 47 and 51. As is notoriously well known in the art, a “circuit switched path” is established from a point of origin to a destination, before information is transferred over the path, and that packets of information are not routed over the “circuit switched path” based on destination information contained within the packets. Therefore, the Applicants respectfully submit that the “packet header for the voice time slot” of Berken fails to teach or suggest the “digital voice packet/digital voice data packet” recited in Applicants’ claims 22, 28, 29, 36, 47 and 51.

Based at least upon the above, the Applicants respectfully submit that Berken fails to teach all of the elements of Applicants’ claims 22, 28, 29, 36, 47 and 51 as required by MPEP §2131, that Berken fails to anticipate Applicants’ claims 22, 28, 29, 36, 47 and 51, and that the rejection of claims 22, 28, 29, 36, 47 and 51 cannot be maintained.

Applicants believe, therefore, that claims 22, 28, 29, 36, 47 and 51 are allowable. Applicants respectfully submit that claims 23-27, 30-35, 37-42, 48-50, 52-59 depend either directly or indirectly from claims 22, 29, 36, 47 and 51, respectively. Because claims 23-27, 30-35, 37-42, 48-50, and 52-59 depend, respectively, from claims 22, 29, 36, 47 and 51, Applicants respectfully submit that claims 23-27, 30-35, 37-42, 48-50, and 52-59 are allowable as well, for at least the same reasons. Therefore, Applicants respectfully request that the rejection of claims 22, 27-29, 32, 35, 36, 39, 42, 47, 50, 51 and 54 under 35 U.S.C. §102(b) be withdrawn.

New Rejections Under 35 U.S.C. §103(a)

Claims 27, 35, 42-46 and 51-54 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Adachi et al. (US 5,777,991, hereinafter “Adachi”). The Applicants respectfully traverse the rejection.

The Applicants respectfully submit that the Examiner has failed to establish a case of *prima facie* obviousness for at least the reasons provided below. M.P.E.P. §2142 clearly states that “[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.” The M.P.E.P. §2142 goes on to state that “[t]o establish a *prima facie* case of

obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure."

Applicants respectfully submit that the Office has failed to establish that Adachi is a valid prior art reference with regard to a rejection under any section of 35 U.S.C. §102 and, therefore, has failed to establish that Adachi is a valid prior art reference with regard to a rejection under 35 U.S.C. §103(a).

M.P.E.P. §2141.01(I) states, in part, "...it must be known whether a patent or publication is in the prior art under 35 U.S.C. §102." The Applicants respectfully submit that the Adachi reference is not valid prior art under any subsection of 35 U.S.C. §102 for reasons set forth below, and therefore is not valid prior art for the purposes of evaluating the present application under 35 U.S.C. §103(a).

M.P.E.P. §706.02(V)(A) states, in part, "If the application is a continuation or divisional of one or more earlier U.S. applications...the effective filing date is the same as the earlier filing date in the line of continuation or divisional applications." M.P.E.P. §706.02(V)(B) states, in part, "If the application is a continuation-in-part of an earlier U.S. application...[a]ny claims which are fully supported under 35 U.S.C. 112 by the earlier parent application have the effective filing date of that earlier parent application."

Applicants respectfully submit that the present application is a continuation of U.S. Patent Application Serial No. 10/141,506, filed May 8, 2002, which is a continuation of U.S. Patent Application Serial No. 09/037,535, filed March 10, 1998, now U.S. Patent No. 6,389,010 issued May 14, 2002, which is a continuation of U.S. Patent Application Serial No. 08/539,817, filed October 5, 1995, now U.S. Patent No. 5,726,984 issued March 10, 1998 (the '817 application). Applicants also respectfully submit that all of the claims of the present application are fully

supported by the Specification of the '817 application. Thus, the effective filing date of the present application is no later than October 5, 1995, which is the latest possible date of invention for the invention claimed in the present application. Accordingly, for a patent application to be valid prior art in regard to the present application for the purposes of any subsection of 35 U.S.C. §102, the patent application must have been filed at least before October 5, 1995.

Adachi was filed with the USPTO on January 25, 1996, thus post-dating the latest possible date of invention of the present application by more than three months. Applicants respectfully submit, therefore, that Adachi is not valid prior art for the purpose of evaluating the present application under 35 U.S.C. §103(a). Applicants note that Adachi claims priority to Japanese Patent Application No. JP 7-011826 (the '826 application) having a filing date of January 27, 1995. The '826 application, however, is a Japanese Kokai that was not published (laid-open) until August 19, 1996, thus post-dating the latest possible date of invention of the present application by more than ten months. Therefore, the Applicants respectfully submit that the '826 application is also not valid prior art for the purposes of evaluating the present application under 35 U.S.C. §103(a). Based at least upon the above, the Applicants respectfully submit that the Office has failed to establish a *prima facie* case of obviousness in view of the proposed combination of Berken and Adachi.

Accordingly, the Applicants respectfully submit that the Office action has not set forth a rejection that meets the mandates of M.P.E.P. §2141 and §2142, and that therefore, claims 27, 35, 42-46 and 51-54 are allowable over the proposed combination of references, notwithstanding the substantive differences between that proposed combination and Applicants' claimed invention. The Applicants request, therefore, that the rejection of claims 27, 35, 42-46 and 51-54 under 35 U.S.C. §103(a) be withdrawn.

Claims 23, 24, 30, 31, 37, 38, 48 and 49 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Perkins (US 5,159,592 A). The Applicants respectfully traverse the rejection. Applicants respectfully submit that claims 23 and 24, claims 30 and 31, claims 37 and 38, and claims 48 and 49 depend either directly or indirectly from independent claims 22, 29, 36 and 47, respectively. Applicants believe that independent claims 22, 29, 36 and 47 are allowable over the proposed combination of references in that Perkins fails to overcome the deficiencies of Berken, as set forth above. Because claims 23, 24, 30, 31, 37, 38, 48 and 49 depend from allowable claims 22, 29, 36 and 47, Applicants respectfully submit that

claims 23, 24, 30, 31, 37, 38, 48 and 49 are also allowable over the proposed combination of Berken and Perkins, for at least the reasons set forth above with respect to claims 22, 29, 36 and 47. Applicants respectfully request, therefore, that the rejection of claims 23, 24, 30, 31, 37, 38, 48 and 49 under 35 U.S.C. §103(a) be withdrawn.

Claims 55 and 56 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Cripps (US 5,838,730 A). The Applicants respectfully traverse the rejection. Applicants respectfully submit that claims 55 and 56 depend either directly or indirectly from independent claim 47. Applicants believe that independent claim 47 is allowable over the proposed combination of references in that Perkins fails to overcome the deficiencies of Berken set forth above. Because claims 55 and 56 depend from allowable claim 47, Applicants respectfully submit that claims 55 and 56 are also allowable over the proposed combination of Berken and Perkins, for at least the reasons set forth above with respect to claim 47. Applicants respectfully request, therefore, that the rejection of claims 55 and 56 under 35 U.S.C. §103(a) be withdrawn.

Claims 60, 61, 62 and 68-73 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view of Angle et al. (US 6,366,771 B1, hereinafter "Angle"). The Applicants respectfully traverse the rejection.

With regard to claim 60, Applicants respectfully submit that the Office has failed to establish a *prima facie* case of obviousness, in that the Office has failed to establish that Angle is a valid prior art reference with regard to a rejection under any section of 35 U.S.C. §102 and, therefore, has failed to establish that Angle is a valid prior art reference with regard to a rejection under 35 U.S.C. §103(a).

Applicants respectfully submit that, as set forth above, the effective filing date of the present application is no later than October 5, 1995, which is the latest possible date of invention for the invention claimed in the present application. Accordingly, for a patent application to be valid prior art in regard to the present application for the purposes of any subsection of 35 U.S.C. §102, the patent application must have been filed at least before October 5, 1995.

Angle was filed with the USPTO on May 21, 1998, and is a continuation-in-part of U.S. Patent Application No. 08/867,076 filed June 2, 1997 (the '076 application), which is a

continuation-in-part of U.S. Patent Application No. 08/493,480 filed June 21, 1995 (the "480 application), now abandoned. Applicants respectfully submit that both Angle and its parent are not valid prior art regarding rejections of the present application under any section of 35 U.S.C. §102, without a valid claim to an earlier priority date. Only the filing date of the '480 application precedes Applicants' latest possible date of invention. The Office, however, has failed to identify relevant teachings in the '480 application, has failed to provide a copy of the '480 application, and instead cites the teachings of Angle, which is a continuation-in-part of a continuation-in-part of the '480 application. The Applicants respectfully submit that because Angle was filed as a continuation-in-part, it admittedly contains subject matter that cannot claim benefit of the filing date of the parent (the '076 application). This is also true of subject matter in the '076 application with regard to the '480 application. The Applicants respectfully submit, therefore, that the Office has failed to establish that the teachings used as the basis for the above rejection of claims 60, 61, 62 and 68-73 are, in fact, taught in the '480 application and, therefore, that those teachings can rightfully claim benefit of the filing date of the '480 application.

Based at least upon the above, the Applicants respectfully submit that the Office has failed to establish that Angle is valid prior art for the purposes of evaluating the present application under 35 U.S.C. §103(a), and has therefore failed to establish a *prima facie* case of obviousness in view of Berken and Adachi.

Accordingly, the Applicants respectfully submit that the Office action has not set forth a rejection that meets the mandates of M.P.E.P. §2141 and §2142 and that, therefore, claim 60 is allowable over the proposed combination of Berken and Angle, notwithstanding the substantive differences between that proposed combination and Applicants' claimed invention. Applicants respectfully submit that claim 60 is an independent claim from which claims 61-73 depend. Because claims 61-73 depend from allowable independent claim 60, Applicants respectfully submit that claims 61-73 are also allowable, for at least the reasons set forth above. Applicants request, therefore, that the rejection of claims 60, 61, 62 and 68-73 under 35 U.S.C. §103(a) be withdrawn.

Claims 63-65 were rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view Angle, and further in view of Lewen et al. (US 5,341,374 A, hereinafter "Lewen"). The Applicants respectfully traverse the rejection.

As an initial matter, Applicants' representative has been unable to identify the Lewen reference on any PTO-892 form issued by the Office. Applicants respectfully request that the Office identify the mailing date of the PTO-892 form on which the Lewen reference appears, or issue a PTO-892 form showing the Lewen reference.

Applicants respectfully submit that claims 63-65 depend either directly or indirectly from independent claim 60. Applicants believe that independent claim 60 is allowable over the proposed combination of references in that Lewen fails to overcome the deficiencies of Berken and Angle, as set forth above. Because claims 63-65 depend from allowable claim 60, Applicants respectfully submit that claims 63-65 are also allowable over the proposed combination of Berken, Angle and Lewen, for at least the reasons set forth above with respect to claim 60. Applicants respectfully request, therefore, that the rejection of claims 63-65 under 35 U.S.C. §103(a) be withdrawn.

Claim 66 was rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view Angle and Lewen, and further in view of McKee et al. (US 5,477,531 A, hereinafter "McKee"). The Applicants respectfully traverse the rejection.

As an initial matter, Applicants representative has been unable to identify the McKee reference on any PTO-892 form issued by the Office. Applicants respectfully request that the Office identify the mailing date of the PTO-892 form on which the McKee reference appears, or issue a PTO-892 form showing the McKee reference.

Applicants respectfully submit that claim 66 depends either directly or indirectly from independent claim 60. Applicants believe that independent claim 60 is allowable over the proposed combination of references in that McKee fails to overcome the deficiencies of Berken, Angle, and Lewen, as set forth above. Because claim 66 depends from allowable claim 60, Applicants respectfully submit that claim 66 is also allowable over the proposed combination of Berken, Angle, Lewen and McKee, for at least the reasons set forth above with respect to claim 60. Applicants respectfully request, therefore, that the rejection of claims 66 under 35 U.S.C. §103(a) be withdrawn.

Claim 67 was rejected under 35 U.S.C. §103(a) as being unpatentable over Berken in view Angle, and further in view of Cripps. The Applicants respectfully traverse the rejection.

Applicants respectfully submit that claim 67 depends either directly or indirectly from independent claim 60. Applicants believe that independent claim 60 is allowable over the proposed combination of references in that Cripps fails to overcome the deficiencies of Berken and Angle, as set forth above. Because claim 67 depends from allowable claim 60, Applicants respectfully submit that claim 67 is also allowable over the proposed combination of Berken, Angle and Cripps, for at least the reasons set forth above with respect to claim 60. Applicants respectfully request, therefore, that the rejection of claims 67 under 35 U.S.C. §103(a) be withdrawn.

Original Rejections Under 35 U.S.C. §103(a)

The instant Office action restates on pages 18-26, the rejections under 35 U.S.C. §103(a) set forth on pages 6-14 of the previous Office action, that claims 22, 27-29, 32, 35, 36, 39, 42, 47, 50, 51 and 54 are unpatentable over Weaver (US 5,956,673) and Drakopoulos (US 5,506,848), that claims 23, 24, 30, 31, 37, 38, 48, 49, 52 and 53 are unpatentable over Weaver, Drakopoulos and Perkins (US 5,159,592), that claims 43 and 46 are unpatentable over Weaver and Harrison (US 5,796,727), that claims 44 and 45 are unpatentable over Weaver, Harrison and Perkins, that claims 25, 33, 40 and 55-59 are unpatentable over Weaver, Drakopoulos and Cripps (US 5,838,730), and that claims 26, 34 and 41 are unpatentable over Weaver, Drakopoulos and Honig (US 5,481,533). The Applicants respectfully traverse the rejections for at least the reasons set forth in the prior response, and maintain that the claims of the Application describe patentable subject matter. For reasons of brevity and clarity, Applicants hereby incorporate herein Applicants' prior responses of record in the Application.

Regarding Examiner's Response to Arguments

With regard to claims 22, 28, 29, 36, 47 and 51, Applicants respectfully maintain that the Weaver and Drakopoulos references, taken alone or in combination, fail to teach, suggest or disclose all of the limitations of Applicants' claimed inventions, for at least the reasons set forth below, and stated in prior Office action responses.

The Office action continues to allege that Weaver discloses "...the digital voice data packets comprises [sic] information used for routing the digital voice data packets (see FIG. 3, 4,

9; voice packets comprise control/signaling information; see col. 3, line 20-40; see col. 5, line 34-46; see col. 6, line 52-65)...”, that “...[i]t is well known in the art when forming and routing packets/frames over the network to remote end/destination, one must use destination address/number/information to route...”, and that “...Drakopoulos teaches wherein the digital voice packets comprise destination information (i.e., signaling/control information) used for routing the outgoing digital voice packets (see col. 5, line 31-42; using the address of the destination end user in voice packet for routing through the wireless network).” (bold in original, underline added) (Office action, page 27, lines 4-6) The Applicants respectfully disagree with the allegations in the Office action regarding what the Weaver and Drakopoulos references allegedly teach or suggest.

Applicants respectfully submit that the Weaver and Drakopoulos references, taken alone or in combination, fail to expressly or implicitly teach or suggest digital voice packets that comprise destination information for routing the digital voice packets through a network.

With respect to Weaver, the Applicants respectfully submit that the Office has previously admitted that “...Weaver does not expressly disclose destination information...”, at page 7, line 7 of the prior Office action (mailed May 2, 2006). (underline added)

Applicants also respectfully submit that Weaver does not implicitly teach or suggest digital voice packets that comprise destination information for routing the digital voice packets through a network.

Applicants respectfully submit that Weaver teaches a method of avoiding tandem vocoding operation. (col. 1, lines 66-67) With reference to FIG. 6, packetized voice data (190) sent wirelessly by a remote encoder (180) in a remote vocoder (15) of a mobile telephone (10 of FIG. 7) is converted by a decoder (200) in a local vocoder (35) into PCM samples (210) for transmission over a public switched telephone network (PSTN) (i.e., a circuit switched, not packet switched, network). Signaling information that replaces some of the low order bits of the PCM samples (210) conveys a detection code from one end to the other, which signals to the receiving end whether or not the decoder (200) is operating in “packet active mode” and passing packetized voice data in a portion of the PCM samples (210) in place of decoded PCM samples. (Abstract, FIG. 4, FIG. 5 and FIG. 9, col. 5, line 1 to col. 6, line 12). At the other end of the PSTN network, the encoder (220) of a local vocoder (55) monitors for the detection code in the

PCM samples (210) to determine whether to encode PCM samples (210) into voice packets (230), or to pass packetized voice data received in a portion of the PCM samples (210) as voice packets (230), to the remote decoder (240) of a remote vocoder (75). (Abstract, FIG. 4, FIG. 5 and FIG. 9, col. 5, line 1 to col. 6, line 12).

Based at least upon the above, Applicants respectfully submit that the signaling information of Weaver, described above and shown in FIG. 4 and FIG. 9, is not contained in digital voice packets, but is conveyed in low order bits of PCM samples (210 of FIG 6) transmitted over a circuit switched network (the PSTN). Furthermore, the Applicants respectfully submit that the signaling information of Weaver is not "destination information for routing digital voice packets through a network" as recited in Applicants' claims, and that the voice packets of Weaver (100, 140, 190 and 230 of Fig. 6) do not comprise Weaver's "signaling information."

Therefore, based at least upon the above, Applicants respectfully submit that Weaver neither explicitly nor implicitly teaches or suggests digital voice packets that comprise destination information for routing the digital voice packets through a network.

The Office continues to allege that "...[i]t is well known in the art when forming and routing packets/frames over the network to remote end/destination, one must use destination address/number/information to route...." (underline added)(Office action, page 27, lines 6-8). Applicants respectfully disagree. This statement alleges that digital voice packets routed through a network always comprise destination information for routing the digital voice packets through the network. This allegation is not based in fact.

The Applicants respectfully submit that it is not a requirement that digital voice packets comprise destination information when forming and routing packets/frames over a network. The following example provides support for Applicants' assertion.

Assume there exists a network of computers A, B and C, that computers A and B are interconnected by a direct communication path, and that computers B and C are interconnected by a direct communication path. These communication paths may be wired or wireless. Further assume that computer A wishes to send digital voice packets to computer C. Applicants respectfully submit that computer A only need communicate to computer B that all digital voice packets received from A should be sent to computer C. Computer A then sends digital voice

packets destined for computer C to computer B, that then forwards the digital voice packets received from computer A to computer C. The digital voice packets sent by computer A are, therefore, routed from computer A to computer C, but need not contain destination information for routing the digital voice packets through the network from computer A through computer B to computer C. It is clear from this example that the statement in the Office action that "...it is well known in the art when forming and routing packets/frames over the network to remote end/destination, one must use destination address/number/information to route...", is false.

The Office action also states that "...Weaver's voice packet comprises control signaling information for routing/switching; otherwise (as one skill [sic] in the ordinary [art] would clearly see that) it is impossible [to] know where or how to route/switch this voice packet...". (Office action, page 27, lines 15-17) The Applicants respectfully disagree, for at least the reasons set forth above. The Applicants also respectfully submit that the Office action fails to identify where Weaver teaches or suggests that "control signaling information" comprises destination information for routing the digital voice packet through the network.

With regard to Drakopoulos, the Applicants respectfully maintain that Drakopoulos fails to teach or suggest digital voice packets that comprise destination information for routing the digital voice packets through a network. Applicants submit that instead, Drakopoulos teaches a circuit switched network that provides a direct path between mobile users.

The Office action states that Drakopoulos teaches "...wherein the digital voice packets comprise destination information (i.e., signaling/control information) used for routing the outgoing digital voice packets (see col. 5, lines 31-42; **using the address of the destination end use in voice packet for routing through the wireless network**)." (bold in original) (Office action, page 27, lines 9-12) Applicants respectfully disagree.

Applicants respectfully submit that Drakopoulos teaches a system and method for assigning channels and time slots upon demand in a mobile communication system which supports wireless communication applications where both end users are mobile. (Summary, col. 1, lines 51-54) The system of Drakopoulos is, in fact, a circuit switched network that provides a direct path between mobile users.

With reference to FIG. 1, FIG. 2, FIG. 3, FIG. 4A and FIG. 4B, and related text (col. 3, line 23 to col. 4, line 53), Applicants respectfully submit that Drakopoulos discloses mobile users (216 of FIG. 2) each in communication with a radio exchange node (REN) (104) through RF distribution points (RDP) (106). The communication between the mobile users (216) and the RENs (104) uses a time division multiple access (TDMA) method. Communication between a mobile user (216) and an RDP (106) uses two types of RF channels, a control channel (214) carrying time slot requests and assignment messages, and a traffic channel (212) carrying voice and/or data. A system may utilize N traffic channels - N channels for uplink and N channels for downlink, where each traffic channel is on a different RF carrier (FIG. 3). The control channel (214) is on its own RF carrier. The time available on the traffic channels and the control channel is made up of a sequence of frames, each frame containing L time slots that may be assigned to a number of different mobiles.

Again with reference FIG. 1, FIG. 2, FIG. 3, FIG. 4A and FIG. 4B, and related text (col. 3, line 23 to col. 4, line 53), Applicants respectfully submit that Drakopoulos teaches that a mobile user wishing to send a voice or data packet to another mobile user sends a reservation request over the control channel through the RDP (106) to the REN (104). The reservation request may include location addresses of source and destination end users. The REN (104) assigns time slots and traffic channels to both mobiles, informs the sending and receiving mobiles (216) over their respective control channels (214) of the time slot and traffic channel assignments, and configures a switch (206) to pass signals received on the uplink traffic channel (212) and time slot assigned to the mobile of the source end user, to a time slot and transceiver downlink traffic channel (212) assigned to the mobile of the destination end user. The mobiles receive the assigned time slot and traffic channel information over their respective control channels (214), tune to the assigned traffic channels, and when the starting times of the assigned time slots arrive, the mobile of the source end user transmits the voice or data packet on the assigned RF uplink traffic channel. The switch (206) in the REN (104) passes a baseband or intermediate frequency signal representing the received voice or data packet from the transceiver (210) supporting the traffic channel assigned to the mobile of the source end user, to the transceiver (210) supporting the traffic channel serving the mobile of the destination end user. The transceiver supporting the traffic channel assigned to the destination end user then sends the

voice or data packet to the mobile of the destination end user. The voice packet is thereby passed from the mobile of the source end user to the mobile of the destination end user.

Applicants respectfully submit that Drakopoulos teaches a circuit switched network, not a packet switched network, and that voice packets are routed through the disclosed network based on time, and not on the contents of voice packets. The time slot and traffic channels are assigned to the mobiles of the source and destination end users, and the network interconnections are configured (i.e., the scheduler configures the switch and transceivers) before a voice packet is sent by the mobile source end user. The locations of the destination and source end users are sent by the source end user over a control channel, not a traffic channel, and therefore are not contained within a voice packet.

Additionally, Applicants respectfully submit that Drakopoulos teaches that the receiver of the transceiver supporting the traffic channel serving the source end user sends a baseband or intermediate frequency signal through the switch (206) to the transceiver supporting the traffic channel of the destination end user, but fails to teach where that baseband or IF signal is demodulated or decoded to extract destination information from a voice packet. (col. 4, lines 7-9) Drakopoulos fails to teach where the contents of a voice packet sent by the source end user as an baseband or IF signal is demodulated or decoded to make the information in the voice packet available for use in routing the voice packet through the network. Applicants respectfully submit, therefore, that Drakopoulos fails to teach or suggest routing using information in the voice packet.

Further, Applicants respectfully submit that Drakopoulos clearly states that "...time slots are used to transfer voice packet and/or data packets between mobile users 216 without buffering, **without processing packet headers**, without voice encoding/decoding, and without other transmission delays at the exchange node 104...", and "...[t]he system achieves high performance by allocating (upon request) a direct path between the mobile end users, which implies that **no buffering, processing of packet headers**, voice encoding/decoding or transmission delays take place at the exchange node." (emphasis added) (col. 6, lines 50-54; col. 19, lines 57-64)

Based at least upon the above, Applicants respectfully submit that Drakopoulos fails to teach or suggest digital voice packets/digital voice data packets that comprise destination information for routing the digital voice packets/digital voice data packets through a network.

Instead, Drakopoulos teaches a circuit switched network that provides a direct path between mobile users.

Therefore, based at least upon the reasons set forth above, the Applicants respectfully submit that Weaver and Drakopoulos, taken alone or in combination, fail to teach or suggest "...wherein the digital voice data packets comprise destination information used for routing the digital voice data packets through the network...", as recited in Applicants' claims 22, 28, 29 and 43; "...wherein the digital voice data is packetized according to a packet protocol comprising destination information used for routing the digital voice data packetized according to the packet protocol through the communication network...", as recited in Applicants' claim 36; "...wherein the digital voice packets comprise destination information used for routing the digital voice packets through the network...", as recited in Applicants' claims 47 and 51; and "...wherein the first digital voice data packets comprise destination information used for routing the first digital voice data packets through the communication network to a second user...", as recited in Applicants' claim 60.

The Office action asserts that "...[c]learly, examiner is asserting an entire TDMA frame as applicant [sic] digital voice packet since a frame has a destination information (in request channel for signaling/control) which [is] followed by [a] voice packet (in payload or voice packet channel)." (Office action, page 29, lines 11-14) The Applicants disagree with the assertion.

As set forth above with reference to the figures and text of Drakopoulos, Applicants respectfully submit that Drakopoulos teaches a circuit switched network arrangement that does not process packet headers. Applicants respectfully submit that routing the entire TDMA frame as a voice packet makes no technical sense, because it may contain voice time slots assigned to a number of different mobile users and would therefore carry voice content for all users to a single destination, and because a TDMA frame is only used on the wireless interface between the mobile telephone and the base station, where no routing occurs. The Applicants also respectfully submit that the destination information that the Office action alleges to exist in the "request channel for signaling/control" would not, in fact, be carried on the traffic channel that carries the TDMA frame, but would be carried on the control channel of Drakopoulos, on a separate RF channel, and therefore not be part of the TDMA frame on the traffic channel. Therefore, the

voice packet would not comprise the destination information for routing the voice packet through the network.

Based at least upon the above, Applicants respectfully submit that Examiner's assertion is not supported by the teachings of Drakopoulos.

Based at least on the above, Applicants respectfully submit that Weaver and Drakopoulos, taken alone or in combination, fail to teach or suggest all of the limitations of Applicants' claimed invention.

The Examiner states that he "...does not understand the applicant argument of 'using destination information for routing digital voice packets through the communication network' is not well established or well known in the art. How could one make a phone call to the remote user, but not defining [sic] a remote user address/telephone use [sic] for routing a call through the network? How could one mail a letter to the other person, but not writing [sic] the destination address used for routing the letter? It is clear to one [of] ordinary skill in the art that it would be impossible 'not to include destination information' use [sic] for routing a call/mail to the receipt [sic], and 'destination information must [be] contain [sic] in the frame/packet which is routed over the network.'" (underline in original) (Office action, page 29, line 19 to page 30, line 4) The Applicants respectfully disagree with the Examiner.

The Applicants respectfully submit that placing a phone call is different from the routing of a voice packet. The example set forth is that of a user entering information identifying a called party for a call through a circuit switched network, which is different from and does not teach the use of voice packets in a packet network.

Similarly, the mailing of a letter is also different from and does not teach the use of voice packets in a packet network. If the Examiner believes that the comparison is valid, the Examiner is requested to identify and cite, in a subsequent Office action, a reference setting forth relevant teachings from such a reference.

Applicants respectfully submit that the assertion that "it would be impossible 'not to include destination information' use [sic] for routing a call/mail to the receipt [sic], and 'destination information must [be] contain [sic] in the frame/packet which is routed over the network..." (Office action, page 30, lines 2-4) was previously addressed above, and was shown to be false.

The Office action alleges that "...it is so well known in the art that TDMA or radio frame contains destination for routing through the communication network..." (Office action, page 30, lines 5-6), and identifies a number of alleged prior art references. Applicants' representative respectfully requests that if the Examiner feels that the identified documents represent valid prior art, that the Office cite the relevant teachings identifying the related references in properly presented rejections in a subsequent Office action, along with the rationale for selection of such reference(s) and teachings..

The Office action asserts (Office action, page 31, lines 12-14) that "...once [sic, one] skilled in the ordinary art would clearly evident [sic] that a "packet header" must contains [sic, contain] "destination information" when sending from one end to the other end. The Applicants respectfully disagree, for at least the reasons set forth above in the example of routing packets without destination information.

With regard to claim 43, Applicants respectfully submit that the allegation regarding the teachings of Weaver with respect to information used for routing, and the allegation that routing requires that packets contain destination information for routing, have been shown above to be false.

The Office action states that "...Harrison discloses adding destination address (i.e., DA per FIG. 5) and col. 12, line 38-61...." (Office action, page 33, line 11-12) Applicants respectfully submit that Harrison fails to teach that field "DA" of FIG. 5 is used for routing a voice packet through a network. Harrison fails to teach any routing of voice packets using the DA information. Instead, Harrison teaches that "...[a]t this stage the Wireless MAC Frame 96 has been received by the CC 2 identified in its DA and routed by the MTSO Switch 54 to the MDSC 42 according to the TYPE field." (underline added)(col. 13, lines 4-7) Applicants respectfully submit, therefore, that the routing is performed based not on the DA field, but on the TYPE field. The "TYPE" field of Harrison specifies the type of service required by this frame (col. 12, lines 50-51), which is different from and does not teach or suggest "destination information", as recited in Applicants' claim 43.

Based at least upon the above, Applicants respectfully maintain that the Weaver and Harrison references, taken alone or in combination, fail to teach or suggest Applicants' claimed invention, for at least the reasons set forth above, and as set forth in the prior Office action responses.

Conclusion

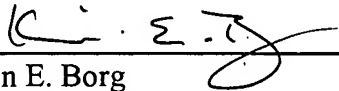
The Applicants believe that all of pending claims 22-73 are in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, the Applicants invite the Examiner to telephone the undersigned at (312) 775-8000.

A Notice of Allowability is courteously solicited.

The Commissioner is hereby authorized to charge any additional fees required by this communication, or credit any overpayment, to Deposit Account No. 13-0017.

Respectfully submitted,

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